CURRICULUM VITAE

Thaleia Zariphopoulou
Presidential Chair in Mathematics
and
V. F. Neuhaus Centennial Professor of Finance
Departments of Mathematics and
IROM, McCombs School of Business
The University of Texas at Austin

EDUCATION

Ph.D. Applied Mathematics, Brown University, 1989
M.S. Applied Mathematics, Brown University, 1985
B.A. Electrical Engineering, National Technical University of Athens, Greece, 1984

AREA OF SPECIALIZATION

Financial Mathematics, Stochastic Optimization, Quantitative Finance

EMPLOYMENT

Academic Positions

The University of Texas at Austin, Presidential Chair in Mathematics and
V. H. Neuhaus Professor of Finance, 2012-present
University of Oxford, Oxford-Man Professor of Quantitative Finance, Oxford-Man Institute and Mathematical Institute, Student of Christ Church College, 2009-2012
The University of Texas at Austin, V. F. Neuhaus Centennial Professor, 1999-present
University of Wisconsin-Madison, Laun Associate Professor of Business and Associate Professor of Mathematics, 1995-2000
University of Wisconsin-Madison, Associate Professor of Business and Mathematics, 1994-1995
University of Wisconsin-Madison, Assistant Professor of Business and Mathematics, 1991-1994
Worcester Polytechnic Institute, Assistant Professor, 1989-1991
Brown University, Teaching Fellow, 1987-1988

Visiting Positions

University of Oxford, Visiting Professor, 2017-2020
Columbia University, FDT Research Center, Affiliate Member, 2017-
Distinguished Visiting Professor, Imperial College, May 2016
Oxford-Man Institute, University of Oxford, Associate Member, 2013-
University of Paris IX-Dauphine, Visiting Professor, May 1999, 2001
Isaac Newton Institute, Cambridge, England, Visiting Scholar, Spring 1995
Brown University, Visiting Assistant Professor, 1988-1989

HONORS AND AWARDS

- International Congress of Mathematicians, Invited talk, Seoul, 2014
- SIAM Fellow, 2012-
- Presidential Chair in Mathematics, The University of Texas at Austin, 2012-
- Oxford-Man Chair in Quantitative Finance, University of Oxford, 2009-2012
- V. F. Neuhaus Centennial Professorship, The University of Texas at Austin, 1999-present
- Romnes Fellowship, University of Wisconsin-Madison, 1997-2000
- Laun Professorship of Finance, University of Wisconsin-Madison, 1995-2000
- President (2006-2008) of the Bachelier Finance Society
- Alfred P. Sloan Foundation Fellowship, 1995-1997

PUBLICATIONS

1. Investment-consumption models with transaction costs, Proceedings of the 29th IEEE Conference Decision and Control, Honolulu, HI (1990).
2. An optimal investment-consumption model with borrowing (with W.H. Fleming), *Mathematics of Operations Research* 16 (1991) 802-822.
3. Consumption-investment models with constraints, Proceedings of the 30th IEEE Conference on Decision and Control, Brighton, England, (1991) 1311-1316.
4. Investment-consumption models with transaction fees and Markov-chain parameters, *SIAM Journal on Control and Optimization* 30 (1992) 613-636.
5. Pricing options with transaction costs (with M. H. A. Davis and V. Panas), Proceedings of International Conference in Finance, ESSEC-AFFI, Paris, France (1992).
6. Optimal investment with undiversifiable income risk (with D. Duffie), *Mathematical Finance* 3 (1993) 135-148.
7. European option pricing with transaction costs (with M. H. A. Davis and V. Panas), *SIAM Journal on Control and Optimization* 31 (1993) 470-493.
8. Asymptotic results for long term investments (with C. F. Huang), Proceedings of International Conference in Finance, ESSEC-AFFI, La Baule, France (1993).
9. Consumption and investment models with constraints, *SIAM Journal on Control and Optimization* 32 (1994) 59-85.
10. Numerical schemes for investment models with singular transactions (with A. Tourin), *Computational Economics* 7 (1994) 287-307.
11. American options and transaction fees (with M. H. A. Davis), in _Mathematical Finance_, Springer-Verlag, (1995).
12. Portfolio selection with transaction costs (with A. Tourin), *Progress in Probability* 36 (1995) 385-391.
13. Optimal environmental management in the presence of irreversibilities (with J. Scheinkman), Proceedings of Fondazione Eri Enrico Mattei, Nota di Lavorno 15 (1996).
14. Optimal consumption and investment when investment opportunities are better for the rich than for the poor (with H. Koo), Proceedings of International Conference in Finance, AFFI, Geneva, Switzerland (1996).
15. Hedging in incomplete markets with HARA utility (with D. Duffie, W. H. Fleming and H. M. Soner), *Journal of Economic Dynamics and Control* 21 (1997) 753-782.
16. Viscosity solutions and numerical schemes for models with singular policies (with A. Tourin), in _Numerical Methods in Finance_, Newton Institute, Cambridge University Press (1997) 245-269.

17. Optimal consumption and portfolio choice with borrowing constraints (with J. L. Vila), *Journal of Economic Theory* 7 (1998) 402-431.
18. Pricing Models with transaction fees (with J. E. Hodder), Stochastic Analysis, Control, Optimization and Applications: a volume in honor of W.H. Fleming, W.M. McEneaney, G.Yin and Q. Zhang (eds.), in Systems and Control: Foundations and Applications, Birkhäuser, Boston (1999) 567-584.
19. Turnpike behavior of long-term investments (with C.F. Huang), *Finance and Stochastics* 2 (1999) 1-20.
20. Bounds on prices of contingent claims in an inter-temporal economy with proportional transaction costs and general preferences (with G. Constantinides), *Finance and Stochastics* 3 (1999) 345-369.
21. Comment on "The valuation of contingent claims under portfolio constraints: Reservation buying and selling prices", *European Finance Review* 3 (1999) 389-392.
22. Optimal investment and consumption models with nonlinear stock dynamics, *Mathematical Methods of Operations Research* 50 (1999) 271-296.
23. Transaction costs in portfolio management and derivative pricing, Introduction to Mathematical Finance, Symposia in Applied Mathematics, AMS, D. Heath and R. Swindle (eds.) (2000) 101-164.
24. On level curves of value functions in optimization models of expected utility (with C. Tiu), *Mathematical Finance* 10 (2000) 323-338.
25. Asset valuation with unhedgeable risks, Proceedings of Conference on Decision and Control (2000) 18-27.
26. Computation of distorted probabilities for diffusion processes via stochastic control methods (with V. Young), *Insurance: Mathematics and Economics* 27 (2000) 1-18.
27. Numerical schemes for variational inequalities arising in international asset pricing (with J.E. Hodder and A. Tourin), *Computational Economics* 17 (2001) 43-80.
28. A solution approach to valuation with unhedgeable risks, *Finance and Stochastics* 5 (2001) 61-82.
29. Free boundary problems in asset pricing, Complementarity: applications, algorithms and extensions, M.C. Ferris, O.L. Mangasarian and J.-S. Pang (eds.), Kluwer Academic Publishers (2001) 104-136.
30. Bounds on derivative prices in an inter temporal setting with proportional costs and multiple securities (with G. Constantinides), *Mathematical Finance* 11 (2001) 331-346.
31. Environmental models with irreversible decisions (with J. Scheinkman), *Journal of Economic Theory* 96 (2002) 180-207.
32. Pricing dynamic insurance risks: an expected utility approach (with V. Young), *Scandinavian Actuarial Journal* 4 (2002) 16-30.
33. Stochastic control methods in asset pricing, Handbook of Stochastic Analysis and Applications, D. Kannan and V. Lakshmikantham (eds.), Marcel Dekker (2003) 102-145.
34. Pricing early exercise claims in incomplete markets (with A. Oberman), *Computational Management Science*, 1 (2003) 75-107.
35. A wealth-dependent investment opportunity set: its effects on optimal consumption and portfolio decisions (with S. Choi, H.-K. Koo and G. Shim), *Annals of Economics and Finance*, 4 (2), (2003) 427-469.
36. An example of indifference prices under exponential preferences (with M. Musiela), *Finance and Stochastics*, 8 (2004) 229-239.
37. A valuation algorithm for indifference prices in incomplete markets (with M. Musiela), *Finance and Stochastics*, 8 (2004) 399-414.
38. Indifference prices of early exercise claims (with M. Musiela), Contemporary Mathematics, American Mathematical Society, 351, Proceedings of the AMS-IMS-SIAM

Joint Summer Research Conference on Mathematics of Finance, G. Yin and Q. Zhang (eds.), AMS, (2004) 259-272.

39. Bounds and asymptotic approximations when volatility is random (with R. Sircar), *SIAM Journal on Control and Optimization*, 43 (2005), 1328-1353.
40. Pricing Insurance via Stochastic Control: optimal consumption and terminal wealth (with V. Young), *Finance*, 25 (2005), 141-155.
41. Dynamic asset allocation and consumption choice in incomplete markets (with S. Stoikov), *Australian Economic Papers*, 44(4), (2005), 414-454.
42. Investment and valuation under backward and forward dynamic exponential utilities in a stochastic factor model (with M. Musiela), *Advances in Mathematical Finance*, (2007), 303-334.
43. Utility valuation of Credit Derivatives: Single and two-name case (with R. Sircar), *Advances in Mathematical Finance*, (2007), 279-301.
44. Credit Derivatives and risk aversion (with T. Leung and R. Sircar), *Advances in Econometrics* (2008), 275-291.
45. On maturity-independent risk measures (with G. Zitkovic), *Proceedings of 47th IEEE Conference on Decision and Control* (2008), 5569-6501.
46. Options: current perspectives, *The New Palgrave Dictionary of Economics*, 2nd Edition, S. N. Durlauf and L. E. Blume (eds.), (2008).
47. Investment performance measurement under asymptotically linear risk tolerance (with T. Zhou), *Handbook of Numerical Analysis*, P.G.Ciarlet (ed.), (2009), 227-253.
48. Portfolio choice under dynamic investment performance criteria (with M. Musiela), *Quantitative Finance*, 9(2), (2009), 161-170.
49. Derivative pricing, investment management and the term structure of exponential utilities: The case of binomial model (with M. Musiela), *Indifference Pricing*, R. Carmona (ed.), Princeton University Press, (2009), 3-41.
50. Optimal asset allocation in a stochastic factor model – an overview and open problems, *RADON Series on Computational and Applied Mathematics*, Advanced Financial Modeling, A. Hansjorg, W. Runggaldier and W. Schachermayer eds., 8 (2009), 427-453.
51. Utility valuation of Credit Derivatives and applications to CDOs (with R. Sircar), *Quantitative Finance*, 10 (2010), 195-208.
52. Indifference valuation in incomplete binomial models (with M. Musiela and K. Sokolova), *Mathematics in Action*, 3(2), (2010), 1-36.
53. Portfolio choice under space-time monotone performance criteria (with M. Musiela), *SIAM Journal on Financial Mathematics*,1 (2010), 326-365.
54. Maturity-independent risk measures (with G. Zitkovic), *SIAM Journal on Financial Mathematics*,1 (2010), 266-288.
55. Stochastic partial differential equations and portfolio choice (with M. Musiela), *Contemporary Quantitative Finance*, Springer-Verlag, (2010), 195-215.
56. Initial investment choice and optimal future allocations under time-monotone performance criteria (with M. Musiela), *International Journal of Theoretical and Applied Finance*, 14(1) (2011), 61-81.
57. Forward indifference valuation of American options (with T. Leung and R. Sircar), *Stochastics* 84(5-6), (2012), 741-770.
58. An approximation scheme for the solution of the optimal investment problem in an incomplete market (with S. Nadtochiy), *SIAM Journal on Financial Mathematics*, 4(1), (2013), 494-538.
59. A class of homothetic forward investment performance processes with non-zero volatility (with S. Nadtochiy), *Inspired by Finance*, Springer-Verlag, (2013), 475-505.
60. On the optimal wealth process in a log-normal market: applications to risk management (with P. Monin), *Journal of Financial Engineering*, 1(2), (2014).

61. Stochastic modeling and methods in portfolio management, *Proceedings of the International Congress of Mathematicians*, Seoul (2014).
62. Forward performance processes in incomplete markets and ill-posed HJB equations (with M. Shkolnikov and R. Sircar), *SIAM Journal on Financial Mathematics,* 7, (2016), 588-618.
63. Forward exponential indifference valuation in an incomplete binomial model (with M. Musiela and E. Sokolova), *Advanced Modeling in Mathematical Finance,* In honor of E. Eberlein, Springer Proceedings in Mathematics and Statistics, (2016), 277-302.
64. Portfolio optimization and stochastic volatility asymptotics (with J.-P. Fouque and R. Sircar), *Mathematical Finance,* 27(3), (2017), 704-745.
65. Representation of homothetic forward performance processes via ergodic and infinite horizon quadratic BSDE in stochastic factor models (with G. Liang), *SIAM Journal on Financial Mathematics,* 8(1), (2017), 344-372.
66. Dynamically consistent investment criteria under model uncertainty: the robust forward criteria (with S. Kallblad and J. Obloj), *Finance & Stochastics* 22(4), (2018), 879-918.
67. An ergodic BSDE approach to forward entropic risk measures: representation and large-maturity behavior (with W.F. Chong, Y. Hu and G. Liang), *Finance & Stochastics,* 23(1), (2019), 239-273.
68. Optimal contract for a fund manager with capital injections and endogenous trading constraints (with S. Nadtochiy), *SIAM Journal in Financial Mathematics,* 10(3), (2019), 698-722.
69. Mean field and N-agent games for optimal investment under relative performance concerns (with D. Lacker), *Mathematical Finance,* 29(4), (2019), 1003-1038.
70. An approximation scheme for semi-linear parabolic PDEs with convex and coercive Hamiltonians (with S. Huang and G. Liang), (2019), *SIAM Journal on Optimization and Control,* 58(1), (2020), 165-191.
71. Predictable forward performance processes: The binomial case (with B. Angoshtari and X. Y. Zhou), *SIAM Journal on Optimization and Control,* 58(1), (2020), 327-347.
72. Personalized robo-advising: an interactive investment process (with A. Capponi and S. Olafsson), (2020), *Management Science,* to appear.
73. Exploration versus exploitation in continuous-time: a relaxed control approach (with H. Wang and X.Y. Zhou), (2019), *Journal of Machine Learning Research*, to appear.
74. Computational Medicine the Present and the Future: Obstetrics and Gynecology Perspectives, (with R. Bukowski, K. Schulz, K. Stephens, D. Semeraro, J. Drake, G. Smith, C. Cordola, T. Hughes, C. Zarins, D. Kusnezov and T. Oden), *American Journal of Obstetrics and Gynecology,* to appear, 2020.
75. Forward rank-dependent performance criteria: time-consistent investment under probability distortions (with X. He and M. Strub), (2020), submitted for publication.
76. On the analyticity of the value function in optimal investment (with O. Mostovyi and M. Sirbu), (2020), submitted for publication.
77. Entropy regularization for Mean Field Games with Learning (with X. Guo and R. Hu), submitted for publication.

BOOKS, MONOGRAPHS

1. *Inspired by Finance*, (Eds. with Y. Kabanov and M. Rutkowski), Spinger-Verlag, 2013.
2. *Stochastic Analysis and Applications*, (Eds. with D. Crisan and B. Hambly), Springer -Verlag, 2014.
3. *"Essays in Mathematical Finance, The Mark H.A. Davis Festschrift"* (Ed. with J. Obloj), in preparation, 2020.

4. *Asymptotic Methods for Portfolio Optimization in Uncertain Market Environments,* (with J.-P. Fouque and R. Sircar), SIAM Book Series, in preparation, 2019
5. *"Stochastic Analysis, Filtering, and Stochastic Optimization: A Commemorative Volume to Honor Mark H. A. Davis's Contributions",* (Ed. with G. Yin), in preparation, 2020.

PREPRINTS, WORK IN PROGRESS

1. Mean-field games under competition concerns and stochastic risk tolerance (with R. Hu), preprint, 2020.
2. On model choice for portfolio selection (with M. Strub), preprint, 2020
3. Fund management under forward performance criteria and competition concerns (with T. Geng and M. Anthropelos), preprint, 2020
4. On the Black's equation for the local risk tolerance function (with S. Kallblad), preprint, 2019
5. Forward portfolio selection with drift uncertainty (with P. Vitoria), preprint 2019, new version 2020, to be submitted in December 2020
6. Real-time model adaptation and optimal portfolio management (with H. Wang), preprint, 2020

INVITATIONS

2021
Plenary address, JMM joint meetings, Washington, DC
"Decision making in Health and Medical care", IMSI Institute, University of Chicago
Bachelier Finance Society seminar
"Introduction to Decision Making and Uncertainty", IMSI Institute, University of Chicago
SIAM, SIFIN SIAG seminar
BIRS Workshop on "Modeling, Learning and Understanding: Modern Challenges between Financial Mathematics, Financial Technology and Financial Economic"

2020
INFORMS Annual Meeting,
IPAM, "High dimensional Hamilton-Jacobi PDEs", UCLA
Conference in Mathematical Finance for Young Researchers, Rutgers University
Princeton University
Wayne State University, Owen's Lecture distinguished speaker
BIRS Workshop on "Stochastic Analysis, Mathematical Finance and Economics, Banff, Canada
BIRS Workshop on "Modeling, learning and understanding: modern challenges in Financial Mathematics", Banff, Canada
Conference in Financial Mathematics, Imperial College, UK
Alan Turing Institute, London, UK
University of Illinois, Urbana Champaign
Rice University, Colloquium
SUSTECH, China
National Technical University of Athens, Athens
SIAM Texas-Louisiana Annual Meeting, Plenary speaker
Oxford University

2019
Columbia University
Johns Hopkins University, Colloquium
University of Illinois, Urbana Champaign
3rd Tianfu Conference in Finance, Chengdu, China
3rd International Congress in Actuarial Sciences and Quantitative Finance, Manizales, Colombia
Workshop in Financial Mathematics, Plenary speaker, University of Siena
Oxford University, UK
Dynamics, Equations and Applications, Plenary speaker, Polish Academy of Sciences, Krakow
SIAM Conference in Financial Mathematics and Engineering, Toronto, Canada

2018
Imperial College
Oxford University
Columbia University
Boeing Colloquium, University of Washington, Seattle
Humboldt University, Berlin, Germany
De Finetti Risk Seminar, University of Milan, Milan, Italy
Colloquium, University of Munster, Munster, Germany
University of Warwick, Warwick, UK
"Stochastic analysis and its applications", BIRS, Oaxaca, Mexico
"Symposium on optimal stopping", Rice University
"Workshop in honor of S. Howison", University of Oxford
International Congress of the Hellenic Mathematics Society, Athens, Greece
"Mathematics and Economics: Trends and Explorations", ETH, Zurich, Switzerland
"Advanced methods in Mathematical Finance", Angers, France
"Financial and Economic Applications", Institute of Mathematics and its Applications, University of Minnesota, Minneapolis
Summer School on Mean-Field Games, IPAM, UCLA, Los Angeles
Computational Health Conference, Dell Medical School, Austin
9th WCMF Meeting, USC

2017
Workshop on "BSDE and Financial Mathematics", plenary speaker, King's College, UK
Columbia University
Meeting of Women in Mathematical Finance, IPAM, UCLA
WCMF 2017, University of Washington, Seattle, WA
Brown University
Robust methods in Probability and Finance, ICERM, Providence
International workshop on BSDE, SPDE and their applications, plenary speaker and tutorial speaker, Edinburgh, UK
"Stochastic dynamical models", Bernoulli Center, Lausanne, Switzerland
Brazilian Mathematics Colloquium 2017, plenary speaker, Rio Janeiro, Brazil
Mean-field games and their applications, IPAM, UCLA
"Advances in Stochastic Analysis for Risk Modeling, CIRM, Marseille, France
Conference on Kinetic Theory, Austin, TX
Conference in Financial Mathematics, Lake Arrowhead, IPAM, UCLA

2016
PIMS, Rio de Janeiro, Brazil
ETH, Zurich, Switzerland
EPFL, Lausanne, Switzerland
Conference on Stochastic Processes, Plenary lecture, U. Maryland
AMS Sectional Meeting, Athens, GA
Stochastic Analysis and Mathematical Finance - A Fruitful Partnership, Oaxaca, Mexico
Summer School Tutorial, Financial Mathematics, University of Alberta, Canada
Conference in Financial Mathematics, University of Michigan, Ann-Arbor
National University of Singapore, Singapore
Northwestern University, Evanston
Imperial College, London, UK
SIAM Conference in Financial Mathematics, Austin, TX

2015
Bachelier Colloquium, Plenary speaker, Metabief, France
University of Michigan, Ann Arbor
"New trends and applications of Differential Equations and Dynamical Systems", Tutorial, University of Buenos Aires, Argentina
“Broad Perspectives and New Directions in Financial Mathematics”, Tutorial, UCLA, IPAM
Inaugural Meeting of Women in Mathematical Finance, IPAM, UCLA
Culminating Workshop, IPAM, Lake Arrowhead
King’s College, Financial Mathematics Colloquium
University of Minnesota, Minneapolis
UCLA, Applied Math Colloquium
Workshop on Options, PIMS, Rio de Janeiro, Brazil
Oxford-Princeton Conference, Princeton
Oxford University, Oxford, UK
International Conference on Stochastic Analysis and Applications, Plenary talk, Hammamed, Tunisia

2014
International Congress of Mathematicians, Invited Lecture, Seoul, 2014
Ecole Polytechnique, Paris, France
Bachelier Seminar, Paris, France
SIAM Conference in Financial Mathematics and Engineering, Chicago
Hong Kong Consortium in Quantitative Finance, Hong Kong
WCMF 2014, University of California, Santa Barbara
Thematic program “Mathematics of Systemic Risk”, PIMS, Vancouver, Canada
“Mathematical Finance: Arbitrage and Portfolio Optimization”, Banff International Research Station, Banff, Canada
Meeting on “Robust Management in Finance”, Paris, France
“New directions in Financial Mathematics and Mathematical Economics”, Banff International Research Station, Banff, Canada
University of Piraeus, Piraeus, Greece
Princeton University

2013
WCMF 2013, University of California, Berkeley
Meeting to honor the 70th birthday of G. Papanicolaou, Stanford University, Palo Alto

Meeting on “Dynamic interactions and market equilibrium”, Crete, Greece
Chinese University of Hong Kong, Hong Kong
Fields Institute, Commodities, Energy and Environmental Finance, Toronto, Canada
Meeting on “Stochastics and Finance” (plenary lecture), Angers, France
Workshop in Mathematical Finance, Zurich, Switzerland

2012
“Probability, Control and Finance”, conference to honor I. Karatzas’s 60th birthday, Columbia University, New York, NY
Course on “Asset allocation and utility theory”, Summer School on Stochastic Finance, University of Athens, Athens, Greece
Summer School on Mathematical Finance, Lisbon, Portugal
Workshop on “Finance and Partial Differential Equations”, Yerevan, Armenia
Workshop on “Perspectives in Analysis and Probability”, (plenary lecture), ETH, Zurich

2011
University of Heidelberg, Heidelberg, Germany (public lecture and Math Colloquium)
6th Bachelier Colloquium, Metabief, France
Princeton University, Princeton, NJ
University of Cambridge, Cambridge, United Kingdom
Workshop on SPDE and applications, Le Mans, France
London School of Economics, London, United Kingdom
Women in Applied Mathematics Workshop, Crete, Greece
4th Western Conference in Mathematical Finance, USC, CA
International Conference on Mathematical Finance and Economics, Istanbul, Turkey
Conference on Financial Mathematics, Al-Akhawayn, Morocco
Stochastic Processes and their Applications, Oxaca, Mexico

2010
Workshop on “New directions in Mathematical Finance”, IPAM, Los Angeles
Workshop on “Foundations of Mathematical Finance”, Fields Institute, Toronto, Canada
5th Bachelier Colloquium, Metabief, France
Heriot-Watt University, Edinburgh, United Kingdom
King’s College, London, United Kingdom
University of Leipzig, Leipzig, Germany
Stanford University, Palo Alto, CA
Oxford-Columbia Workshop in Financial Mathematics, New York
Conference on “Stochastic Processes and their applications”, Osaka, Japan
6th Oxford-Princeton Workshop on Financial Mathematics and Stochastic Analysis, Oxford, United Kingdom
International Research Forum, Hong Kong
Meeting on “Partial Differential Equations and Finance”, Rutgers University

2009
AMS National Meeting, Washington
5th Oxford-Princeton Workshop on Financial Mathematics and Stochastic Analysis, Princeton
Meeting on “Advanced Mathematical Methods in Finance”, Alesund, Norway
PDE and Mathematical Finance, Stockholm, Sweden
3rd WCMF, University of California, Santa Barbara, California
Northwestern University, Evanston, Illinois
Illinois Institute of Technology, Chicago, Illinois

Meeting on “Quantitative Methods in Finance”, Sydney, Australia

2008
AMS National Meeting, San Diego
University of Oxford
Conference on “Stochastic Analysis in Finance and Insurance”, Oberwolfach, Germany
Brown University
CBMS-NSF Conference in Mathematical Finance, University of California, Santa Barbara
5th European Congress of Mathematicians, Amsterdam, Holland
5th World Congress of the Bachelier Finance Society, London, UK
Kick-off Workshop, Special semester on Stochastics with emphasis in Finance, RICAM, Linz, Austria
International Congress on Price, Liquidity and Credit Risks, Konstanz, Germany
Optimization and optimal control, Special semester on Stochastics with emphasis in Finance, RICAM, Linz, Austria
Dahlem Conference, Humboldt University, Berlin, Germany
SIAM Conference on Control and Optimization, Cancun, Mexico

2007
6th Winter School in Financial Mathematics (tutorial lectures), Lunteren, Netherlands
Conference on ‘Recent Developments in Financial and Insurance Mathematics and the interplay with the Industry’, Oberwolfach, Germany
WCQF, Stanford University
Kent-Purdue Mini-Symposium on Financial Mathematics, Kent State University
Meeting on “Financial Engineering and Financial Mathematics”, University of Michigan, Ann Arbor
Workshop in Financial Mathematics, International Center for Mathematical Sciences, Edinburgh
Meeting on “Advanced Mathematical Methods in Finance”, Vienna, Austria
University of Technology, Vienna, Austria
Princeton University
Fields Institute, Toronto, Canada
Quantitative Methods in Finance Conference, Sydney, Australia

2006
Symposium on Optimal Stopping and Applications, University of Manchester, England
Bachelier Seminar, Paris VI, Paris, France
Conference in Honor of S. Sethi, The University of Texas at Dallas
Workshop in Mathematical Finance and insurance, Lijiang, China
Conference on Markov Processes and related topics, University of Wisconsin, Madison, WI
Workshop on ‘Discontinuous change in behavior issues in PDEs’, Anogia, Greece
Fourth World Congress of the Bachelier Finance Society (Plenary Lecture), Tokyo, Japan
Southest Actuarial Forum, Dallas
University of California, Santa Barbara
Mathematical Finance, 60th Birthday Conference in Honor of Dilip Madan, University of Maryland, College Park
Southern Africa Mathematical Sciences Association 2006 Conference, Botswana

2005
Workshop on Financial Mathematics, Carnegie Mellon University, Pittsburg, PN
Stochastic Modeling, Center for Mathematical Research, University of Montreal, Montreal, Canada

SIAM Conference on Control and Optimization (plenary lecture), New Orleans, LA
Annual Meeting of the Association of Women in Mathematics, New Orleans, LA
Meeting on Free Boundary problems and Applications, Buenos Aires, Argentina
Di Tella University, Buenos Aires, Argentina
Workshop on PDEs and Mathematical Finance, KTH, Stockholm, Sweden
Opening Workshop on Mathematics, Statistics and Econometrics, SAMSI, NC
Workshop on Credit Risk, SAMSI, NC

2004
Workshop on Mathematical Finance, Humboldt University of Berlin, Berlin, Germany
Program on Tools for Modeling and Data Analysis in Finance and Asset Pricing (plenary lecture), Institute of Mathematics and its Applications, Minneapolis, MN
Cornell University, Ithaca, NY
University of Southern California, Los Angeles, CA
University of Michigan, Ann Arbor, MI
Imperial College, London, England
Meeting in Mathematical Finance, Yellow Mountain, China

2003
Western Finance Association Meeting, Los Cabos, Mexico
AMS-IMS-SIAM Joint Summer Research Conference in Mathematical Finance, Snowbird, UT
Workshop on Probability and Partial Differential Equations in Modern Applied Mathematics, IMA, Minneapolis, MN
Columbia University, New York, NY
Stochastic Analysis in Finance and Insurance, Oberwolfach, Germany
Princeton University
Numerical probabilistic methods for high-dimensional problems in finance, American Institute of Mathematics, Research Conference Center, Palo Alto, CA
Summer School in Economics and Finance, Samos, Greece

2002
Stanford University, Palo Alto, CA
Columbia University, New York, NY
Conference on Quantitative Methods in Finance (plenary speaker), QMF'02, Sydney, Australia
Conference on Risk and Insurance (plenary speaker), Samos, Greece
Bachelier Seminar, University of Paris VI, Paris, France
Invited hour lecture at AMS Meeting at University of Michigan, Ann Arbor, MI
Technical University of Vienna, Vienna, Austria
Athens University of Economics and Business, Athens, Greece
Special session on “Viscosity solutions and their Applications”, AMS Meeting, Pisa, Italy
Tenth International Colloquium on Numerical Analysis and Computer Sciences and Applications, Plovdiv, Bulgaria
Conference on Stochastic Analysis and Finance, Warsaw, Poland
King's College, London, UK

2001
Joint AMS-FMS Meeting, Lyon, France
SIAM Conference on Control, San Diego, CA
INFORMS, Applied Probability Conference, New York, NY
Annual Meeting of the International Statistical Institute, Seoul, Korea
Conference on Financial Mathematics: Risk Management, Modeling and Numerical Methods,

IPAM, UCLA, CA
Short course on Mathematical Finance (2 lectures), Thematic program on "Viscosity solutions methods in PDE", Pacific Institute for the Mathematical Sciences, Vancouver, Canada
Invited hour lecture at AMS meeting at Ohio State University, OH
International Conference on Computational and Mathematical Finance, Seoul, Korea

2000
Third World Congress of Nonlinear Analysis (WCNA-2000), University of Catania, Catania, Italy
Conference on Mathematical Analysis and its Applications, Athens, Greece
First Conference in Actuarial Science and Finance (plenary lecture), Samos, Greece
Conference on Mathematical Finance (plenary lecture), University of Missouri, Columbia
Conference on Stochastic Analysis in Finance and Insurance, Oberwolfach, Germany
Fifth World Congress of the Bernoulli Society, Guanajuato, Mexico
Fourth Columbia--JAFEE Conference on Mathematical Finance and Financial Engineering, Tokyo, Japan

1999
Workshop in Finance, National Technical University, Seoul, Korea
Risk Conference, New York, NY
University of Wisconsin-Madison, Madison, WI
AMS International Meeting, Denton, TX
ICCP99: International Conference on Complementarity Problems, Madison, WI

1999
Economic Theory Conference, Rhodes, Greece
INFORMS, Applied Probability Conference, Ulm, Germany
Workshop on Risk Theory, Oberwolfach, Germany
Workshop on Mathematical Finance, Strobl and Vienna, Austria
Morning Star First School of Mathematical Finance, Beijing, China
University of Ulm, Ulm, Germany
Workshop on Mathematical Finance, Austin, TX
Conference on Decision and Control, Phoenix, AZ

1998
UCLA, Los Angeles, CA
Morgan Stanley, New York, NY
Conference on Computational Economics, Cambridge, England
Summer School on "Viscosity solutions and their applications", Herakleion, Greece
University of Texas at Austin, Austin, TX
Stanford University, Palo Alto, CA
Morgan Stanley, New York, NY

1997
AMS Annual Meeting (tutorial lecture), San Diego, CA
University of Chicago, Chicago, IL
Princeton University, Princeton, NJ
ETH, Zurich, Switzerland
AMS Regional Meeting, Detroit, MI
ESSEC, Paris, France
International Symposium on Mathematical Programming (plenary lecture), Lausanne,

Switzerland
Conference on Quantitative Methods in Finance, QMF ‘97, Sydney, Australia
Conference on Risk Management, Finance and Insurance, Oberwolfach, Germany
AMS Meeting, Ixtapa, Mexico

1996
Workshop on Mathematical Finance and Applications, Humboldt University, Berlin, Germany
University of Vienna, Austria
International Meeting in Finance, AFFI, Geneva, Switzerland
University of Illinois, Urbana-Champaign, IL
SIAM Conference on Control and its Applications, Kansas, MO
University of Paris IX-Dauphine, Paris, France
ESSEC, Paris, France

1995
Bank of England Conference, Isaac Newton Institute, Cambridge, England
Conference on Numerical Methods in Mathematical Finance,
Isaac Newton Institute, Cambridge, England\
Conference on Mathematical Finance, Institute for Advanced Study, Princeton, NJ
University of Chicago, Chicago, IL
Midwest PDE meeting, Madison, WI
SIAM Conference on Decision and Control, St. Louis, MO
Workshop on Markets with Frictions, University of Chicago, Chicago, IL
Symposium on Options, University of Paris IX-Dauphine, Paris, France

1994
SIAM Conference on Control and its Applications, San Diego, CA
Meeting in Mathematical Economics and Mathematical Finance, Tunis, Tunis
Meeting on Computational Economics and Mathematical Finance, Amsterdam, Netherlands
ORSA/TIMS International Meeting, Anchorage, AL
Regional Meeting of IMS (special session), Cleveland, OH
Conference on Mathematical Finance, Institute of Advanced Study, Princeton, NJ
Washington University-St Louis, St. Louis, MO
AMS Meeting, Cincinnati, OH

1993
Meeting on Stochastic Processes and their Applications, Ascona, Switzerland
International Meeting in Finance, AFFI, La Baule, France
Workshop in Mathematical Finance, IMA, Minneapolis, MN
Workshop on Options, University of Illinois, Urbana-Champaign, IL
Cornell University, Ithaca, NY
University of Crete, Herakleion, Greece

1992
SIAM Conference on Control and its Applications, Minneapolis, MN
Meeting on Mathematical Finance, Oberwolfach, Germany
International Meeting in Finance, AFFI, Paris, France
National ORSA/TIMS meeting, Orlando, FL
NSF-INRIA Franco-American Workshop on Mathematical Finance, Paris, France
University of Chicago, Chicago, IL
Brown University, Providence, RI

University of Wisconsin, Madison, WI

1991
30th IEEE Conference on Decision and Control, Brighton, England
National Meeting on Systems Engineering, Santiago, Chile
TIMS/SOBRAPO International Meeting, Rio de Janeiro, Brazil
Conference on Hamilton-Jacobi Equations, Castelliogne, Italy
Journe de Microeconomie, Caen, France
ORSA/TIMS Special Interest Conference on Applied Probability, Monterey, CA

1990
29th IEEE Conference on Decision and Control, Honolulu, HI
Caisse Autonome de Refinancement (CAR), Paris, France
INRIA Conference on Mathematical Models in Finance, Rocquencout, France
Stanford University, Palo Alto, CA
University of Paris IX-Dauphine, Paris, France
MIT, Boston, MA

SERVICE TO THE PROFESSION

- President (2006-2008) of the *Bachelier Finance Society*
- Vice-President (2004-2006) of the *Bachelier Finance Society*

- Vice Chair of the SIAM Activity Group (SIAG) of Financial Mathematics and Engineering (1/1/2007-12/31/2008 and 1/1/2009-12/31/2010)

- Member of SIAM Books Reviews, 2015-
- Member of SIAM News Editorial Board, 2012-2014
- Member of SIAM Best Paper Prize Committee, 2016
- Member of SIAM Fellows selection committee, 2014, 2015
- Member of SIAM Junior Prize Committee, 2012

- Member of Grand Prix Luis Bachelier, 2014, 2016, 2017, 2018, 2019, 2020
- Member of Scientific Advisory Board, FMC2, 2009-2013
- Member of EMMA Committee, College de France, 2011-2013
- Chair of selection committee of the Bruti - Liberatti award, 2012
- NSF Panelist
- Member of Think Tank, Ernst & Young, "Financial Literacy" and "Math Tutoring" Programs, 2016

Diversity

- Co-organizer (with T. Beder and X. Guo), "Conference of Women in Financial Mathematics", IPAM, UCLA, 2015 and 2017
- Co-organizer (with K. Weston), "Broad directions in Mathematical Finance", Rutgers University, 2020 (postponed due to pandemic)

Editorial Positions
Academic Journals

Senior Editor of *Transactions of Mathematics and its Applications,* 2019-

Associate Editor of *SIAM Journal on Control and Optimization*, 2004-present
Associate Editor of *SIAM Journal on Financial Mathematics*, 2008-present
Associate Editor of *Mathematical Finance*, 1999-present
Associate Editor of *Decisions in Economics and Finance*, 2001-present
Associate Editor of *Finance and Stochastics*, 2003-present
Associate Editor of *Mathematics in Action*, 2008-present
Associate Editor of *Mathematics of Operations Research*, 2015-
Associate Editor of the *Quarterly Journal in Finance*, 2010-present
Associate Editor of *Annals of Applied Probability*, 1997-2002

American Mathematical Society, Short Course Subcommittee, 2018-2020
American Mathematical Society, Short Course Subcommittee (Chair), 2020-2021

Monograph Series

Editor, SIAM Series in Financial Mathematics (2015-)

Member of Editorial Board of SIAM Series in Financial Mathematics (2013-2014)
Member of Editorial Board of Applied Math Series of AIMS (2010-)

Conference organization (selected)

- Co-organizer (with A. Lo), "Decision making in health and medical care", IMSI Institute, University of Chicago, 2021
- Co-organizer (with H. Hansen, T. Bielecki, M. Nutz, X. Guo and P. Klibanoff), Summer Program on "Introduction to decision making and uncertainty", IMSI Institute, University of Chicago, 2021
- Co-organizer (with K. Weston), "Broad directions in Mathematical Finance", Rutgers, 2020
- Co-organizer (with C. Frei, A. Papapantoleon, A. Capponi and R. Sircar), BIRS Workshop on Modeling, Learning and Understanding: modern challenges between Financial Mathematics, Financial Technology and Financial Economics
- Co-organizer (with T. Beder and X. Guo), Meeting of Women in Financial Mathematics, IPAM, UCLA, 2017
- Member of Scientific Committee of "WCMF 2017", Washington, Seattle
- Member of Scientific Committee of "SIAM Conference in Financial Mathematics", Austin, TX, 2016.
- Member of Scientific Committee of "International workshop of BSDE, SPDE and their applications", Edinburgh, UK
- Co-organizer (with R. Carmona and G. Papanicolaou) of the long program "Broad Perspectives and New Directions in Financial Mathematics", IPAM, UCLA, March – June, 2015

- Co-organizer (with R. Carmona and A. Schied) of the workshop on "The Mathematics of high-frequency financial markets", IPAM, UCLA, 2015
- Co-organizer (with T. Beder and X. Guo), Inaugural meeting of Women in Financial Mathematics, IPAM, UCLA, 2015
- Co-organizer (with M. Sirbu and G. Zitkovic) of the 5^{th} WCMF Conference, Austin, 2015
- Organizer of mini-symposium on " Forward asset allocation", SIAM conference on Financial Mathematics and Engineering, Chicago, 2014
- Member of the Scientific Committee of the 8th World Congress of the Bachelier Finance Society, Brussels, 2014
- Co-organizer (with R. Sircar, U. Horst and M. Grasselli) of a meeting on "New Directions in Financial Mathematics and Mathematical Economics", in Banff International Research Station (BIRS), July 2014
- Co-organizer (with D. Crisan and B. Hambly) of the meeting on "Stochastics and applications", University of Oxford, 2013
- Co-organizer (with J.-P. Fouque, K. Giesecke and G. Papanicolaou) of the workshop on "Current Developments in Mathematical Finance", IMA, University of Minneapolis, 2012
- Member of the Scientific Committee of the "8th World Congress in Probability and Statistics", Istanbul, 2012
- Co-organizer (with I. Karatzas and A. Schied) of the Workshop on "Advances in Portfolio Theory and Investment Management", Oxford-Man Institute, 2011
- Co-organizer (with R. Carmona) of the Workshop on "The New Commodity Market", Oxford-Man Institute, 2011
- Member of the Scientific Committee of the Conference on "Mathematical Finance and Partial Differential Equations", Rutgers University, 2011
- Member of the Scientific Committee of the "New Directions in Financial Mathematics" Conference, IPAM, UCLA, 2010
- Member of the Organizing Committee of the "International Research Forum", Hong Kong, 2010
- Co-organizer (with X.Y. Zhou) of the First Annual Conference on "Contemporary Issues and New Directions", Oxford-Man Institute, 2011
- Co-organizer (with G. Zitkovic and M. Sirbu) of the 2nd Western Conference in Mathematical Finance, Austin, 2008
  Member of Organizing Committee of the 2009 SIAM Annual Meeting, Denver, 2009
- Member of Scientific Committee of the SIAM Conference in "Financial Mathematics and Engineering", New York, 2008
- Organizer of a special session on " Optimization and valuation in incomplete markets", American Mathematical Society Meeting, New Orleans, 2007
- Member of Scientific Committee of the SIAM Conference in Financial Mathematics and Engineering, Boston, 2006
- Member of Scientific Committee of the SAMSI (Statistical and Applied Mathematics Institute) Program on Financial Mathematics, Fall 2005
- Member of Organizing Committee of Workshop "Semi-martingale Theory and Practice in Finance", Banff, Canada, 2004
- Organizer and chair of Scientific Committee of the "2nd Congress of the *Bachelier Finance Society*", Crete, Greece, 2002

POSTDOCTORAL FELLOWS

G. Brunick (UT-Austin; Ph.D., Carnegie Mellon University)

W.Gu (UT-Austin; Ph.D., UC, Berkeley)
G. Liang (Oxford; Ph.D., University of Oxford)
J. Lim (UT-Austin; Ph.D., Courant Institute, NYU)
S. Nadtochiy (Oxford; Ph.D., Princeton)
J. Ruf (Oxford; Ph.D., Columbia University)
G. Shim (UT-Austin; Ph.D., Seoul National University)
M. Tehranchi (UT-Austin; Ph.D., Princeton)

GRADUATE STUDENTS

Current
H. Waldon, L. Zhang

H. Wang (2018), X. Han (2017), T. Giang (2017), P. Vitoria (2015), B. Angoshtari (2014), S. Kallblad (2014), P. Monin (2013), N. Ringer (2011), T. Zhou (2008), K. Sokolova (2007), Q. Su (2007), S. Stoikov (2005), M. Mazaheri (2002), C. Tiu (2002), S. MacNair (2000)

DOCTORAL DISSERTATION COMMITTEES

Current
J. Jackson

Y. Zhang (2020), R. Li (2017), R. Fayvisovich (2016), J. Bello-Rivas (2016), P. Goswami (2016), A. Kontaxis (2015), J. Li (2015), A. Ellanskaya (2014), Y. Choi (2012), Y. Wu (2012), X. Yu (2012), Y. Zhao (2012), D. Schwartz (2012), G. Liang (2010), B. Yang (2010), A. Ditanna (2009), M. Anthropelos (2008), R. Elie (2007), S. Kolos (2005), W. Hann (2005), B. Choi (2002), R. Melbourn (2000), C. Mueller (2000), T. Simmons (2000), B. Franklin (1999), Y. Oguz (1997), M. Giand-Abizatti (1996), M. Cho (1994), A. Tourin (1992)